

NOTES ON GEOGRAPHIC DISTRIBUTION

Amphibia, Anura, Centrolenidae, *Centrolene mariaelenae*: Distribution extension, Ecuador

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The amphibian fauna from the eastern Andean slopes of Ecuador is poorly known. Most studies have mainly surveyed only the northern region at the Quijos River Basin leaving large areas unexplored, particularly in southern Ecuador. The eastern Andean slopes of Ecuador hold the largest species richness of Centrolenids in the country (Cisneros-Heredia and McDiarmid 2006), but several species remain known just from their type-localities and surrounding areas (e.g., *Centrolene audax*, *C. mariaelenae*, *C. pipilatum*, *Cochranella anomala*, *C. caritocommata*; Lynch and Duellman 1973; Cisneros-Heredia and McDiarmid 2006).

Centrolene mariaelenae is a recently described Centrolenid species known only from its male holotype collected at a stream on the slopes of the Cordillera de Tzunantza (1820 m elevation), province of Zamora-Chinchipe, southeastern Ecuador (Cisneros-Heredia and McDiarmid 2006). During our work on the diversity and evolution of the Glassfrogs from Ecuador, we recently found additional specimens of *Centrolene mariaelenae* in the collection of the Museo de Zoología, Pontificia Universidad Católica del Ecuador, Quito, Ecuador (QCAZ).

Three specimens were collected at the Hollín River (ca. 00°58' S, 77°45' W, c. 1400 m elevation), province of Napo, on 10 December 2001 (QCAZ 18618-9, Figures 1–2) and 27

January 2002 (QCAZ 22363). Two additional specimens (QCAZ 21252, 31729) were found nearby Negro River (01°24' S, 78°15' W, 1423 m elevation), province of Tungurahua, on 28 July 2002 and 10 April 2006, respectively. These records represent first provincial records, and extend the distributional range of *C. mariaelenae* ca. 400 km NNE (Hollín River) and c. 310 km NNE (Negro River) (Figure 3).

Centrolene mariaelenae was diagnosed from all other Andean Centrolenid frogs by having humeral spines, transparent parietal peritoneum, and guanophores covering the pericardial, hepatic, and visceral peritonea. All the specimens herein reported are very similar to the holotype (characters of the holotype in parenthesis), except for having a snout slightly protruding in lateral view (truncate), light lavender tint on dorsum background (cream dorsum background); such differences are attributed to intraspecific variation. *Centrolene mariaelenae* was regarded as part of the *C. gorzulai* species-group in its original description; yet recent molecular analyses suggest that the species is probably more related to other Andean Centrolenids rather than to Guianan species. Undescribed Centrolenids apparently related to *C. mariaelenae* recently discovered in eastern Ecuador support this hypothesis.

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Figure 1. Dorsal view of specimens of *Centrolene mariaelenae* (QCAZ 18618-9) collected at the Hollín River, province of Napo, Ecuador, on 10 December 2001.



Figure 2. Ventral view of a specimen of *Centrolene mariaelenae* (QCAZ 18618) collected at the Hollín River, province of Napo, Ecuador, on 10 December 2001.

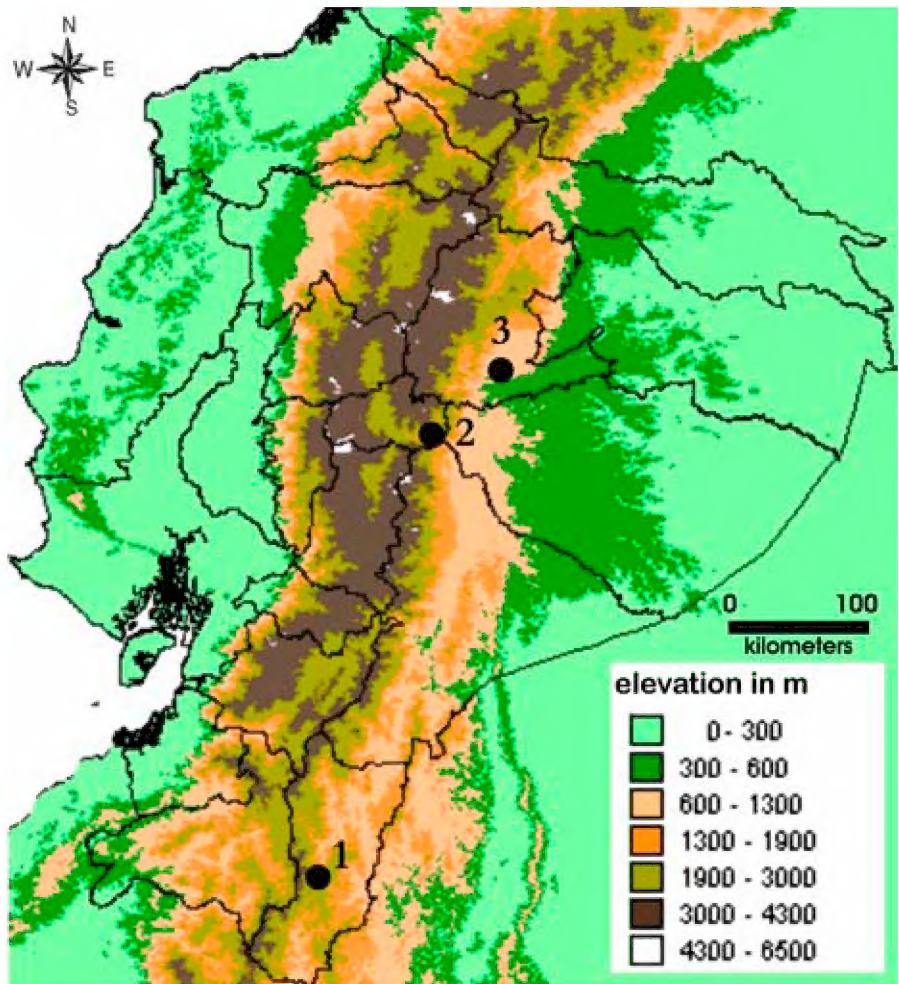


Figure 3. Distribution of *Centrolene mariaelenae* in Ecuador. 1 = western slope of Contrafuerte de Tzunananza, province of Zamora-Chinchipe (type locality); 2 = Negro River, province of Tungurahua; 3 = Hollín River, province of Napo.

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